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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,337	11/26/2003	David Brooke Hatfield	03W041	9488

43076	7590	05/15/2007
MARK D. SARALINO (GENERAL)		
RENNER, OTTO, BOISSELLE & SKLAR, LLP		
1621 EUCLID AVENUE, NINETEENTH FLOOR		
CLEVELAND, OH 44115-2191		

EXAMINER	
JANAKIRAMAN, NITHYA	

ART UNIT	PAPER NUMBER
2123	

MAIL DATE	DELIVERY MODE
05/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/723,337	Applicant(s) HATFIELD ET AL.	
	Examiner Nithya Janakiraman	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 13-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 22-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the amendment filed on 2/23/2007. Claims 1-12 and 22-45 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-12, 36-39 and 42-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Regarding independent claim 1, the method lacks critical steps in the act of “modeling the effect of a molecular contaminant film on performance of an optical system”. The claim does not appear to accomplish the stated goal of the preamble. As none of the depending claims corrects the outstanding issue, all depending claims are rejected as well.
3. Regarding independent claim 42, the phrase “the at least one component” lacks antecedent basis and thus is vague and indefinite. In addition, the method lacks essential steps required to perform the process of “modeling the effect of a molecular contaminant film on performance of an optical system” stated in the claim preamble. As none of the depending claims corrects the outstanding issues, all depending claims are rejected as well.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-12 and 22-38 and 40-45 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

5. Regarding independent claim 1, a method of modeling with no discernable output, such as plotting, is not sufficient to be considered statutory subject matter. As currently presented, the claim ends in a mathematical abstract and creates no useful, tangible, or concrete result.

Depending claims 2-12 and 36-38 are rejected as well. However, claim 39 overcomes the rejection of claim 1.

6. Regarding independent claim 22, the system appears directed to the process carried out, not the apparatus of a medium, processor, and program. It creates no useful, tangible, or concrete result. As none of the depending claims resolve the outstanding issue, depending claims 23-35 and 40-41 are rejected as well.

7. Regarding independent claim 42, a method of modeling with no discernable output is not sufficient to be considered statutory subject matter. There is no claimed useful, tangible, or concrete result. As none of the depending claims resolve the outstanding issue depending claims 43-45 are rejected as well.

Response to Arguments

8. Applicant's arguments with respect to claim 8 have been fully considered and are persuasive. Applicant states:

One of ordinary skill in the art would recognize that real world factors may cause or make it difficult to obtain an absorbance spectrum of a material that is exactly 1 micron. Instead, the thickness of the material may be slightly more or slightly less than 1 micron. The use of the word "about" does not render the claim indefinite to one of ordinary skill in the art.

The above reasoning serves to further limit the metes and bounds of the claimed subject matter.

The rejection under 35 U.S.C. §112, second paragraph of claim 8 has been withdrawn.

9. Applicant's prior art arguments, see pages 14-17, filed 2/23/2007, with respect to claims 1-12 and 22-37 have been fully considered and are persuasive. The rejection under 35 U.S.C. §102(e) of claims 1-12 and 22-37 has been withdrawn. Any indication of allowable subject matter is withheld pending response to the rejections of claims 1-12 and 22-45.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

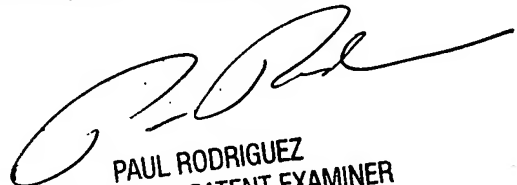
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nithya Janakiraman whose telephone number is 571-270-1003. The examiner can normally be reached on Monday-Thursday, 8:00am-5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on (571)272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NJ


PAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100